



Service Standard 5.1.5

Protective Clothing and Accessories

Date of Issue 22 September 2010

Version Number 5.0

1. Purpose

- 1.1 This Service Standard updates version 4.0
- 1.2 This Service Standard provides direction to ensure that personnel engaged with various NSW RFS operational activities are provided with appropriate levels of protective clothing and equipment.
- 1.3 It must be emphasised that protective clothing and accessories should always be utilized in conjunction with safe working practices.
- 1.4 It is recognized that “bush fire” may sometimes be referred to as “wildland” in other industry publications and in line with NSW RFS practices the term “bush fire” replaces any reference to “wildland” within this document.
- 1.5 In line with AFAC terminology, PPC is used for clothing (eg. Bush fire jacket and pants etc) while PPE is used for equipment (eg. helmet, goggles etc).

2. Policy

- 2.1 All personnel engaged with various NSW RFS operational activities must wear appropriate personal protective equipment/clothing (PPE/C) for the intended task.
- 2.2 Only items of PPC and PPE that have been approved by the NSW RFS are to be issued.
- 2.3 The appropriate sizing and issued protective clothing must be worn correctly when attending an incident.
- 2.4 PPC and PPE must also be worn correctly during any practical training, and must be worn correctly during any ‘hot fire’ training. PPC is not required to be worn during theory training sessions.
- 2.5 PPC garments are not to be modified or changed in any way.
- 2.6 Only garments certified after 1999 are to be worn on the fire ground or when undertaking any practical training, in particular with live fire. These items must show the certification label and the Standard number on the item.

- 2.7 Where reference is made throughout this Service Standard and its related SOPs to “approved by the NSW RFS” it is assumed to mean by the NSW RFS through the Government tendering process as meeting minimum standards.

3. Links

- [SOP 5.1.5-1 Protective Clothing and Accessories – Bush Fire & Non-BA Firefighting](#)
- [SOP 5.1.5-2 Protective Clothing and Accessories – Structural BA Firefighting](#)
- [SOP 5.1.5-3 Protective Fire Blankets](#)
- [SS 3.1.6 Fire and Other Incident Operations](#)
- [SS 5.1.9 Breathing Apparatus](#)
- [Occupational Health & Safety Act 2000](#)
- [Standards Australia](#)

4. Who is responsible for implementing the Service Standard?

Director Infrastructure Services

5. Amendments

- | | |
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| ▪ Comprehensive review to reflect current format and practices | Feb 2010 |
| ▪ Clause 2.7 amended to clarify that only PPC/PPE approved by the NSW RFS may be purchased | Sept 2010 |



SOP 5.1.5-1

Protective Clothing and Accessories – Bush Fire and Non-BA Firefighting

This SOP forms part of	Service Standard 5.1.5 Protective Clothing and Accessories
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Related Forms	None
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1. Purpose

- 1.1 This Standard Operating Procedure provides clear and consistent, guidelines for appropriate levels of PPC, PPE and accessories for the NSW Rural Fire Service (NSW RFS).

2. Procedures

2.1 Bush Fire Two-Piece Jacket and Pants

- (a) These items must to be supplied to all personnel engaged with various NSW RFS operational activities. They provide the maximum operational and dressing flexibility to handle the various tasks that are undertaken by the NSW RFS.
- (b) The pants also act as the under-garment for the BA Firefighting overtrousers in structural fire fighting.
- (c) The two piece assists in “down” dressing to an appropriate non-synthetic undershirt or other non-synthetic shirt when firefighters are away from the “active” fire ground, an example of which is the approved NSW RFS yellow utility shirt.
- (d) Under garments of synthetic and part synthetic composition must not be worn under PPC. Personal undergarments with metal attachments either on or within the undergarment must not be worn as these items may cause localised burn injuries.
- (e) For guidance it is recommended that the following be worn under the two piece Bush Fire PPC as they will afford a higher level of protection:
 - (i) Non-synthetic ie cotton, personal undergarments;
 - (ii) Non-synthetic cotton shirt e.g. the NSW RFS yellow utility shirt
 - (iii) Cotton “King Gee” type work shorts or similar

Note: the NSW RFS tests the PPC with and without underclothing to ascertain the level of protection of its PPC. Currently NSW RFS PPC alone can offer a high level of protection.

- (f) Epaulettes, name, rank, brigade and certification badges must, where affixed, be in the locations as detailed in Appendix 2.
- (g) District Managers and other Service Managers responsible for issuance of PPE and PPC must ensure that all new items issued since October 2001 carry the Certification label to the Australian Standard, the manufacturer's label and serial number, and the 'PROBAN' garment label. These garments must have the high collar and the 3M fire coat trim as shown in Appendix 2.

2.2 Bush Fire and Non-BA Firefighting Personal Protective Clothing

- (a) For all activities undertaken by firefighters and fire support personnel entering an incident ground (except for BA and structural firefighting), the following items of protective clothing are to be issued (Appendix 3):
 - (i) bush fire two piece
 - (ii) bush fire helmet with neck protector
 - (iii) bush fire gloves
 - (iv) bush fire goggles
 - (v) disposable smoke mask
 - (vi) firefighters boots
 - (vii) protective hood

2.3 Bush Fire Helmets

- (a) Only bush fire helmets approved by the NSW RFS are to be issued.
- (b) The appropriate helmet must be worn on the fire ground.
- (c) Appendix 1 details the colouring, reflective markings and graphics for all operational, non-operational, junior and cadet bush firefighting helmets and also details the requirements for affixing names on helmets. No other markings are to appear on NSW RFS helmets.
- (d) The helmets are suitable for other related duties such as Chainsaw Work, Safe Working on Roofs (SWR), Remote Area Fire Fighting Teams (RAFT).
- (e) The bush fire helmets will be supplied with four stripes of yellow fluorescent and retro-reflective tape around the crown of the helmets. **This tape is not to be removed, repositioned or obscured.**

2.4 Firefighter Boots

- (a) Only boots approved by the NSW RFS are to be issued.
- (b) Firefighter boots are compulsory on the fireground
- (c) Standard issue firefighter's boots are suitable for all incidents and activities undertaken by the NSW RFS

2.5 Protective Hood

- (a) This item is to be carried (in the pocket of their PPC) by personnel on the fireground. It **MUST NOT** be donned (or worn around the neck) unless it is required to improve thermal protection to the head where deemed required.
- (b) It **MUST NOT** be worn (or worn around the neck) during “normal” firefighting operations due to the effects of extreme heat stress which may develop.

Note: *This item will only provide protection to the head for limited fire overrun situations. Under no circumstances should it be construed that the availability and use of these hoods will increase the chance of surviving a serious fire entrapment. Their availability must not encourage firefighters to deliberately place themselves or others into a situation where it might reasonably be predicted that they could be overrun by a fire. Normally accepted appreciation and size up of every fire situation must continue in a bid to ensure that fire overrun situations are avoided.*

2.6 Bush Fire Goggles

- (a) Only goggles approved by the NSW RFS are to be issued.
- (b) They must be worn whilst firefighting or when the firefighter is in smoke, dust, particulate matter or whilst carrying out other related duties i.e. chainsaw work.

2.7 Smoke Mask

- (a) Only the P2 fire retardant particulate mask approved by the NSW RFS is to be issued.
- (b) It must be worn when a member is working in a hazardous environment where the risk of exposure to airborne particulates is present.

2.8 Winter Weight Bush Fire Jacket (3WJ) Yellow

- (a) This jacket is for use in cool to cold environments and is available for general issue to all firefighters. This jacket is approved for bush fire fighting.
- (b) It provides higher levels of thermal protection and as such should not be worn in summer heat as heat stress may develop. As a risk management tool the jacket has an orange collar so that crew leaders and officers can identify those that are wearing the jacket.
- (c) It may be worn during periods of cold, winter operations or on late night operations.
- (d) Firefighters who are issued with a Structural BA Jacket (SBJ) do not need to be allocated a winter weight bush fire jacket (3WJ). However, as the SBJ has a higher thermal protection, heat stress is likely if used for bush fire fighting.

2.9 Black Woollen Jacket (BWJ)

- (a)** The BWJ may still be worn in cold environments only
- (b)** This jacket must not be worn when firefighting

2.10 Chainsaw Protective Equipment

- (a)** Only chainsaw equipment approved by the NSW RFS is to be issued..
- (b)** The following equipment must be made available to current approved chainsaw operators;
 - Bush Fire PPC
 - Bush Fire helmet or chainsaw helmet
 - Bush Fire goggles or chainsaw helmet visor
 - Bush Fire gloves
 - Ear muffs
 - Chainsaw chaps or chainsaw cut resistant over-trousers
 - Firefighters boots



SOP 5.1.5-2

Protective Clothing and Accessories – Structural and BA Firefighting

This SOP forms part of Service Standard 5.1.5 Protective Clothing and Accessories
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Related Forms None

1. Purpose

- 1.1 This Standard Operating Procedure provides clear and consistent guidelines for appropriate levels of PPC, PPE and accessories for the NSW Rural Fire Service (NSW RFS).
- 1.2 It is recognised that breathing apparatus may be utilised for a variety of fire incidents for example vehicle fires, gas fires, and putrescible waste fires as well as offensive structural fire fighting operations.

2. Procedures

2.1 Structural and BA Firefighting Jacket and Overtrousers

- (a) For all firefighters who are certified as breathing apparatus operators and whose brigade is accredited (refer to SS5.1.9 Breathing Apparatus and associated SOPs) to undertake offensive structural firefighting using BA, the following protective clothing will be issued (Appendix 4):
 - (i) offensive structural jacket and overtrousers
 - (ii) bush fire two-piece trousers
 - (iii) structural gloves
 - (iv) structural helmet
 - (v) firefighters boots
 - (vi) protective hood

Note: Only these items approved by the NSW RFS are to be issued.

- (b) The District Managers will ensure that these items are issued to all current, qualified BA firefighters.
- (c) The two-piece bush fire jacket MUST NOT be worn under the offensive structural jacket due to the potential for heat stress.
- (d) Epaulettes, name, rank, brigade and certification badges must, where affixed, be in the locations as detailed in Appendix 2.
- (e) Under very limited circumstances (due to the potential development of extreme heat stress) offensive structural jacket or overtrousers can be

worn during grass/bush firefighting and other routine operations during short periods or cold conditions.

- (f) District Managers must ensure that all new items issued since October 2001 carry the Certification label to the Australian Standard, the manufacturer's label and serial number, on the garments.

2.2 Structural and BA Firefighting Accessories

The District Manager must ensure that the necessary accessories listed below are made available to current certified BA firefighters:

- (a) breathing apparatus and
- (b) distress signal units
- (c) Personnel guide lines
- (d) Torches

It is accepted that the above is supplied and maintained as a part of the ensemble of breathing apparatus equipment

Only these items approved by the NSW RFS are to be issued.

2.3 Structural Helmets

- (a) Only structural helmets approved by the NSW RFS are to be issued.
- (b) Appendix 2 details the colouring, reflective markings and graphics for all operational structural firefighting helmets and also details the requirements for affixing names on helmets. No other markings are to appear on NSW RFS helmets.
- (c) Under limited circumstances a structural helmet can be worn during grass/bush firefighting and other routine operations for short periods. . These helmets are highly insulative, are heavy and may lead to the wearer suffering heat stress and neck fatigue if worn for long periods of time during extensive grass/bush firefighting or other routine operations.
- (d) The structural helmets will be supplied with four stripes of yellow fluorescent and retro-reflective tape around the crown of the helmets.
This tape is not to be removed, repositioned or obscured.

2.4 Protective Hood

Only protective hoods approved by the NSW RFS are to be issued and must be worn in all offensive firefighting operations whenever breathing apparatus is utilised.

2.5 Firefighter's Boots

- (a) Only boots approved by the NSW RFS are to be issued.
- (b) Standard issue firefighter's boots are suitable for all incidents and activities undertaken by the NSW RFS
- (c) Firefighter's boots are compulsory on the fireground.

Appendix 1

**NSW Rural Fire Service
 Bush Fire Helmets**



Commissioner	Assistant Commissioner	Chief Superintendent	Superintendent	Inspector
Group Captain	Deputy Group Captain	Captain	Senior Deputy Captain	Deputy Captain
Member	Trainee	Training Instructor	Communications Captain	Communications Senior Deputy Captain
Communications Deputy Captain	Communications Member	Catering Captain	Catering Senior Deputy Captain	Catering Deputy Captain
Catering Member	Cadet Coordinator	Cadet Deputy Coordinator	Cadet Instructor	Adult Cadet Member and Cadet
Junior Member	Fire Investigation	RFS Media Officer	RFS Media Liaison	Media
Chaplain	Critical Incident Support Services	Surname Back of Helmet		

Appendix 1 Cont.

NSW Rural Fire Service Helmet Identification

OPERATIONAL HELMETS		
RANK/POSITION	COLOUR	REFLECTIVE MARKING/GRAPHIC
Trainee	White	25mm Blue band around base
Brigade Firefighter	White	25mm White band around base
Brigade Deputy Captain	White	2 x 10mm Red stripes over crown and 25mm Red band around base
Brigade Senior Deputy Captain	Red	2 x 10mm White stripes over crown and 25mm White band around base
Brigade Captain	Red	25mm Red band around base
Communications Member	White	COMMUNICATIONS in 25mm Black lettering to each side and 25mm White band around base
Communications Deputy Captain	White	COMMUNICATIONS in 25mm Black lettering to each side and 2 x 10mm Red stripes over crown and 25mm Red band around base
Communications Senior Deputy Captain	Red	COMMUNICATIONS in 25mm White lettering to each side and 2 x 10mm White stripes over crown and 25mm White band around base
Communications Captain	Red	COMMUNICATIONS in 25mm White lettering to each side and 25mm Red band around base
Catering Member	White	CATERING in 25mm Black lettering to each side and 25mm White band around base
Catering Deputy Captain	White	CATERING in 25mm Black lettering to each side and 2 x 10mm Red stripes over crown and 25mm Red band around base
Catering Senior Deputy Captain	Red	CATERING in 25mm White lettering to each side and 2 x 10mm White stripes over crown and 25mm White band around base
Catering Captain	Red	CATERING in 25mm White lettering to each side and 25mm Red band around base
Deputy Group Captain	Orange	2 x 10mm White stripes over crown and 25mm White band around base
Group Captain	Orange	25mm White band around base
Inspector/Deputy Fire Control Officer	Orange	I in 50mm Black lettering to each side and 25mm Orange band around base
Superintendent/Fire Control Officer	Orange	S in 50mm Black lettering to each side and 25mm Orange band around base
Chief Superintendent	Black	CS in 50mm White lettering to each side and 2 x 10mm White stripes over crown and 25mm White band around base
Assistant Commissioner	Black	AC in 50mm White lettering to each side and 25mm White band around base
Commissioner	Black	C in 50mm White lettering to each side

Appendix 1 Cont.

NON-OPERATIONAL HELMETS		
Chaplain	Purple	† in 50mm White and CHAPLAIN in 25mm White lettering to each side
Fire Investigation	Blue	FI in 50mm White lettering to each side
Training Instructor	Blue	INSTRUCTOR in 25mm White lettering to each side
Media Officer	Yellow	MEDIA OFFICER in 25mm Black lettering to each side and 2 x 10mm Black stripes over crown and 25mm Black band around base
Media Liaison	Yellow	MEDIA LIAISON in 25mm Black lettering to each side
Media	Yellow	MEDIA in 25mm Black lettering to each side but having no RFS logo
CADET and JUNIOR HELMETS		
Cadet Recruit	White	CADETS in 25mm Green lettering to each side and 25mm Green band around base
Cadet	White	CADETS in 25mm Green lettering to each side and 25mm Green band around base
Cadet Deputy Captain	White	CADETS in 25mm Green lettering to each side and 25mm Green band around base
Cadet Senior Deputy Captain	White	CADETS in 25mm Green lettering to each side and 25mm Green band around base
Cadet Captain	White	CADETS in 25mm Green lettering to each side and 25mm Green band around base
Cadet Instructor	White	CADETS INSTRUCTOR in 25mm Green lettering to each side and 25mm Green band around base
Cadet Coordinator and Cadet Deputy Coordinator	White	CADET COORDINATOR in 25mm Green lettering to each side and 25mm Green band around base
Junior	White	JUNIOR in 25mm Green lettering to each side and 25mm Green band around base

NAMES on helmets are optional – if used the name must be placed centrally across the back as low to the base as possible.

Names must be the Surname (Last Name) only in Helvetica Narrow Bold 25mm high x maximum 140mm long in reflective lettering 3M 680 CR or equivalent. Both bush fire and structural fire fighting helmets will be supplied with four stripes of yellow fluorescent and retro-reflective tape around the crown of the helmets in accordance with AS 1801:1997 and AS 4067:2004. This tape is not to be removed or obscured.

Black lettering for White, Orange and Yellow helmets; White lettering for Red, Black, Blue and Purple helmets and Green lettering for Cadets.

Apart from the markings noted above, no other markings are to appear on RFS helmets.

Apart from the markings shown in Appendix 2 no other markings are to be sewn, marked or attached to any PPC or PPE.

Appendix 2

Note: New jackets will have epaulettes and two pockets. Name, rank, qualification/s and brigade name are to be sewn onto the pocket flaps.



Appendix 3 Bush Fire items.



Bush Fire Jacket



Bush Fire Winter Weight Jacket



Pants (Rear view showing pockets)



Protective Hood

Appendix 3 cont.



Bush Fire Helmet



Bush Fire Gloves



Goggles Type 1



Goggles Type 2



Firefighters Boots

Appendix 4 Structural and BA items



Structural Jacket and Overtrousers



Structural Helmet



Protective Hood



Structural Gloves



Firefighters Boots



SOP 5.1.5-3

Protective Fire Blankets

This SOP forms part of Service Standard 5.1.5 Protective Clothing and Accessories

Related Forms None

1. Purpose

- 1.1 The NSW Rural Fire Service (NSW RFS) has a duty of care under the *Occupational Health & Safety Act* and common law to provide as safe a working environment for our firefighters as possible. The development of our protective fire blankets is linked to ISO and Australian Standard. They should ensure an adequate level of protection is provided to assist in minimising injuries in bush fire fighting burn overs.

2. Procedure

2.1 Mandatory Blanket Supply

Dedicated operational front line appliances and dedicated front line command vehicles, i.e. those which are likely to spend a significant part of their operational time under conditions faced by front line appliances (e.g. group captains' vehicles, four wheel drive fire control officer vehicles).

2.2 Optional Blanket Supply

Other command/support vehicles such as personnel carriers, two wheel drive fire control officer vehicles and communications vehicles should not be exposed to the same risk, therefore provision of blankets should be optional, depending on local circumstances.

2.3 Number of Blankets

- (a) One (1) blanket per seat for dedicated appliances.
- (b) One (1) blanket per person who would normally occupy a command or support vehicle whilst carrying out front line duties.

2.4 Storage

- (a) Blankets must be stored within the crew cabin of appliances/vehicles.
- (b) Actual placement within crew cabin is left to local determination having regard for the need for security, accessibility and protection.
- (c) The blankets take priority over the storage of non-critical items within crew cabins.
- (d) The blankets must be folded correctly and kept in their protective covers.